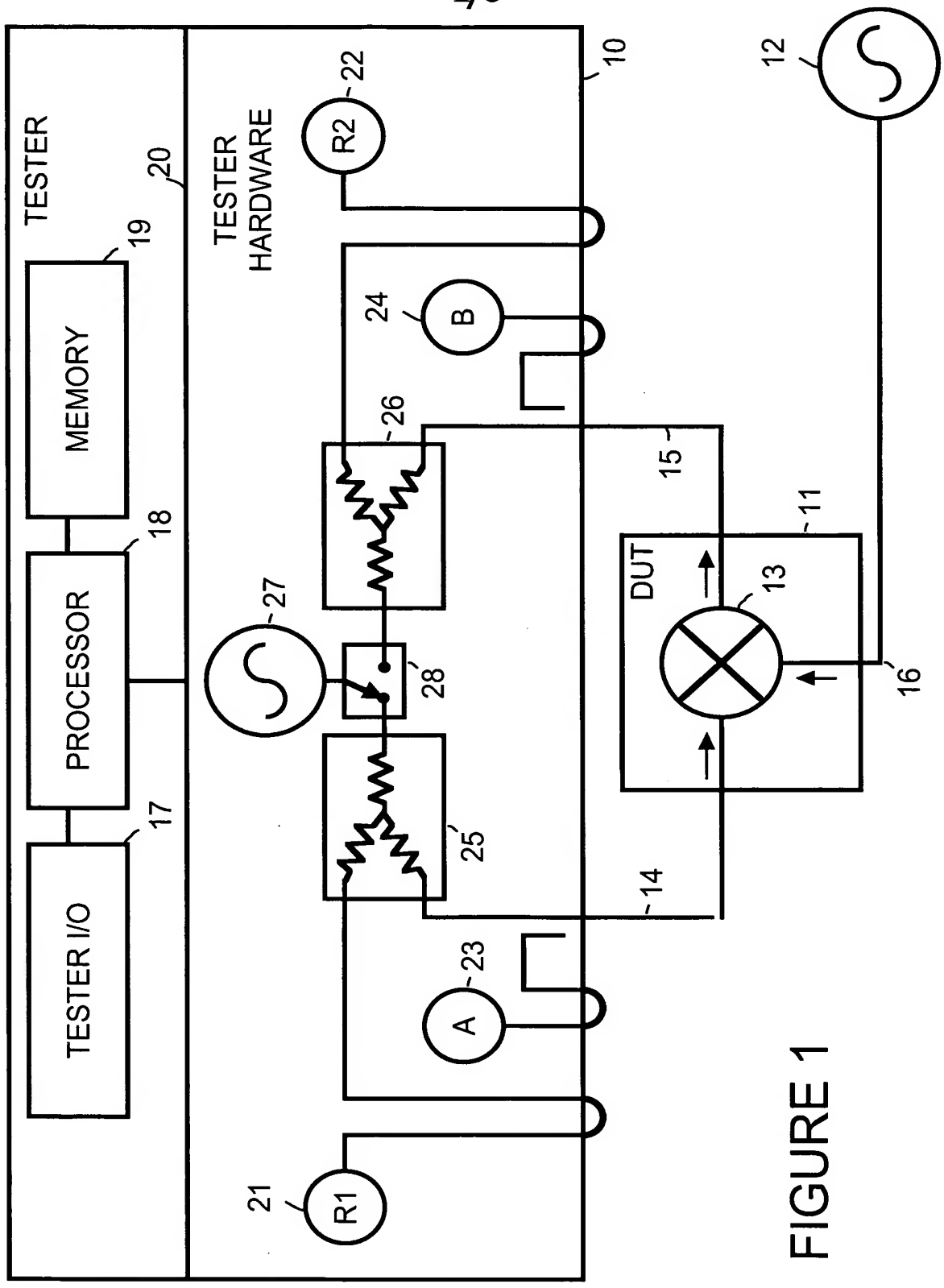
TESTER
MEMORY
PROCESSOR
TESTER I/O
TESTER HARDWARE
10
12
20
19
18
17
22
R2
24
B
26
15
11
DUT
13
27
28
16
25
14
23
A
21
R1

FIGURE 1

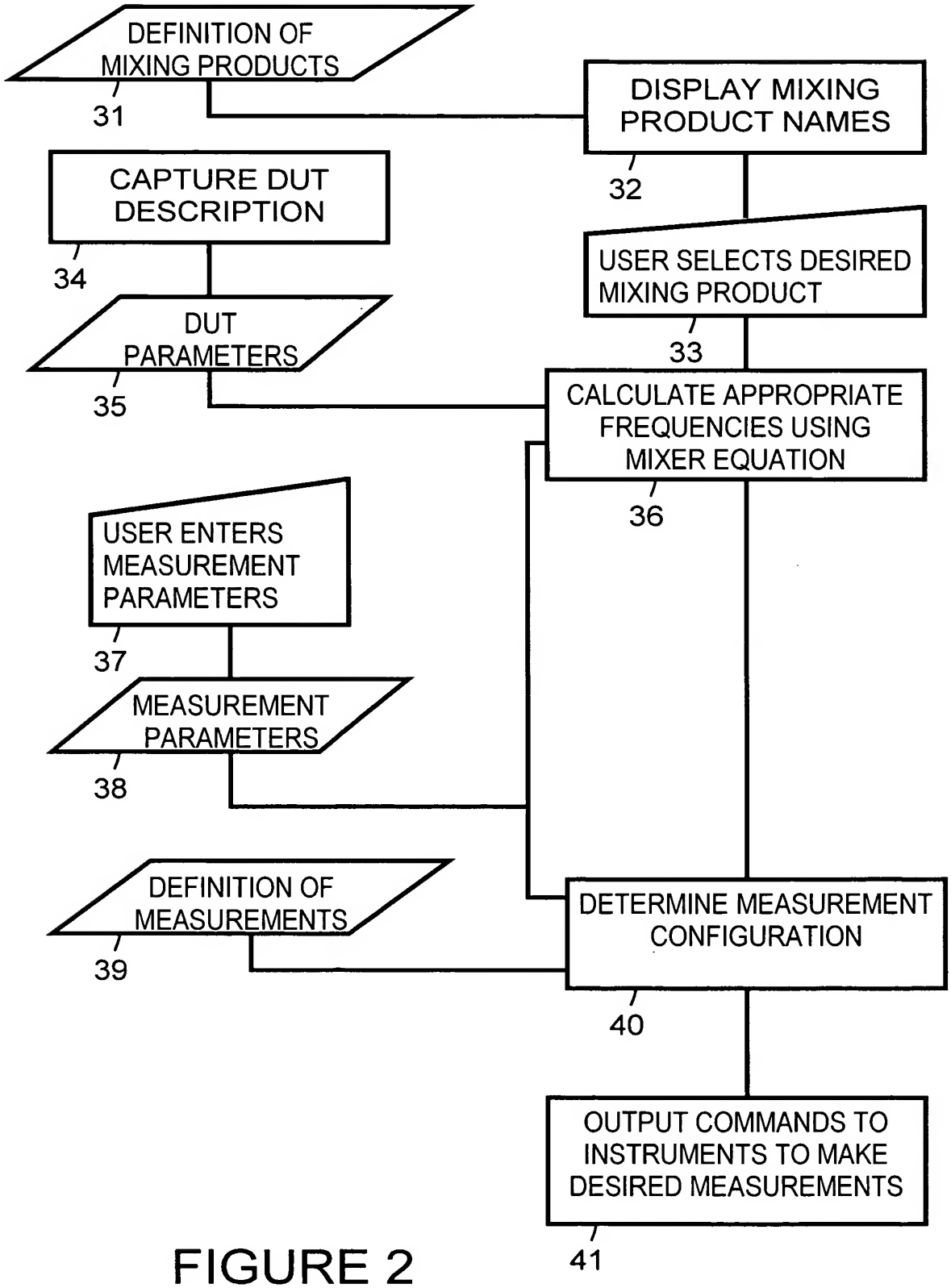
DEFINITION OF MIXING PRODUCTS
31
DISPLAY MIXING PRODUCT NAMES
32
CAPTURE DUT DESCRIPTION
34
USER SELECTS DESIRED MIXING PRODUCT
33
DUT PARAMETERS
35
CALCULATE APPROPRIATE FREQUENCIES USING MIXER EQUATION
36
USER ENTERS MEASUREMENT PARAMETERS
37
MEASUREMENT PARAMETERS
38
DEFINITION OF MEASUREMENTS
39
DETERMINE MEASUREMENT CONFIGURATION
40
OUTPUT COMMANDS TO INSTRUMENTS TO MAKE DESIRED MEASUREMENTS
41

FIGURE 2

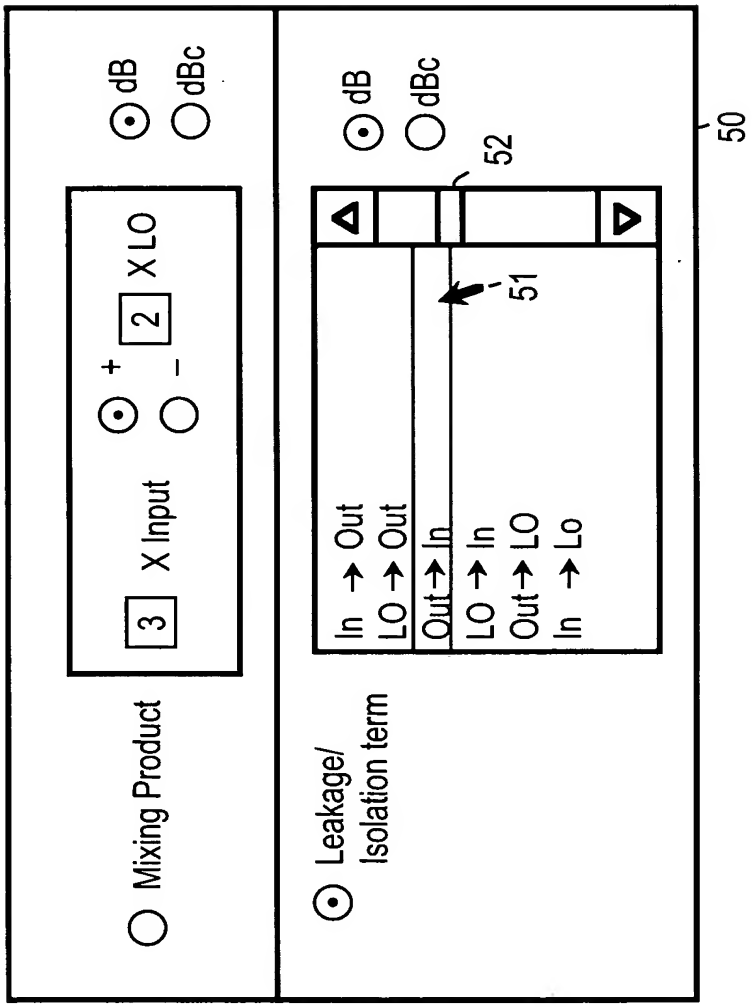
dB
dBc
X LO
2
+
–
X Input
3
Mixing Product
dB
dBc
52
50
51
In → Out
LO → Out
Out → In
LO → In
Out → LO
In → Lo
Leakage/
Isolation term

FIGURE 3

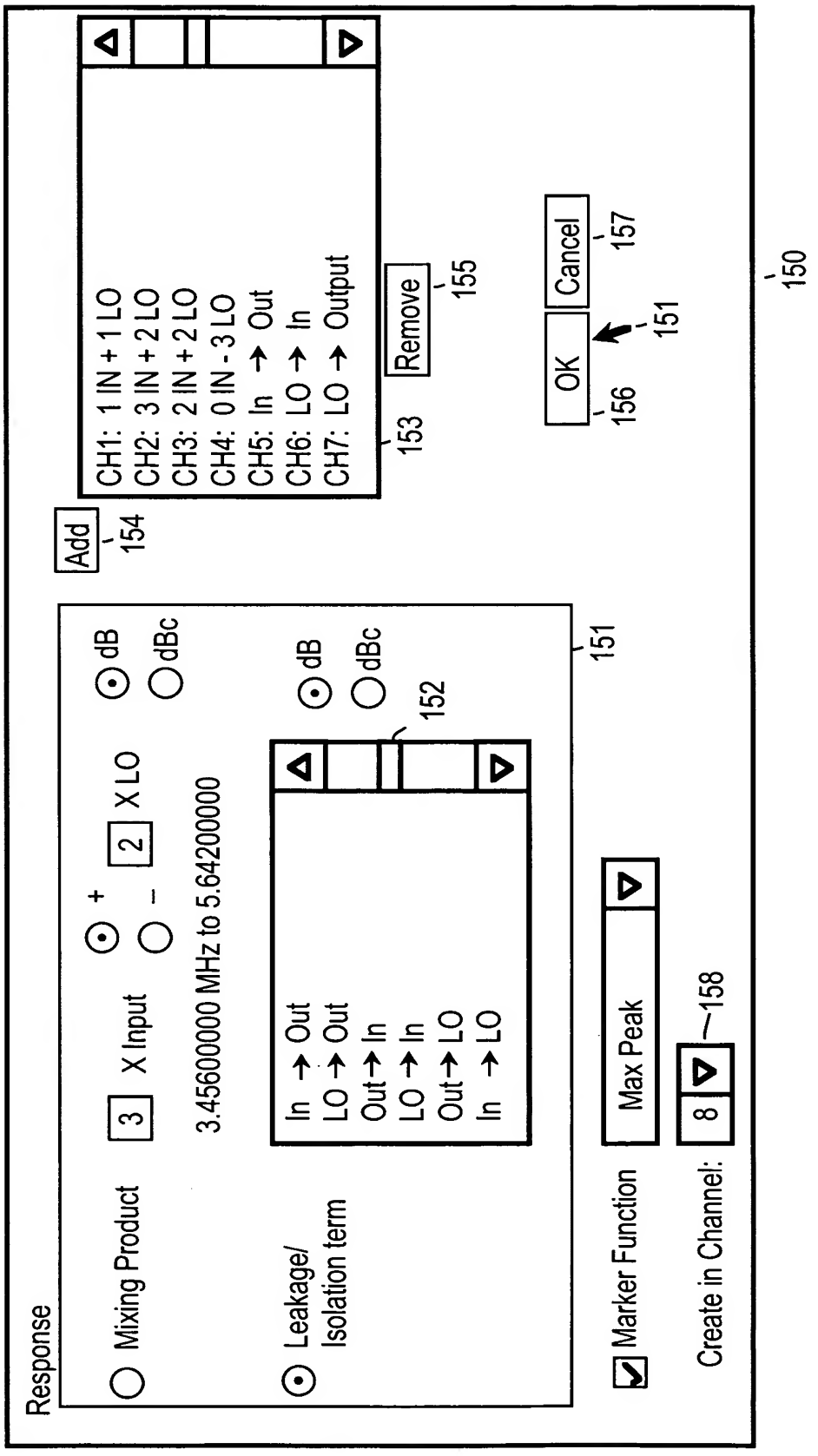
Response
Mixing Product
3
X Input
+
–
2
X LO
dB
dBc
3.45600000 MHz to 5.64200000
Leakage/
Isolation term
In → Out
LO → Out
Out → In
LO → In
Out → LO
In → LO
152
151
Marker Function
Max Peak
Create in Channel:
8
158
Add
154
CH1: 1 IN + 1 LO
CH2: 3 IN + 2 LO
CH3: 2 IN + 2 LO
CH4: 0 IN - 3 LO
CH5: In → Out
CH6: LO → In
CH7: LO → Output
153
Remove
155
OK
156
Cancel
157
151
150

FIGURE 4

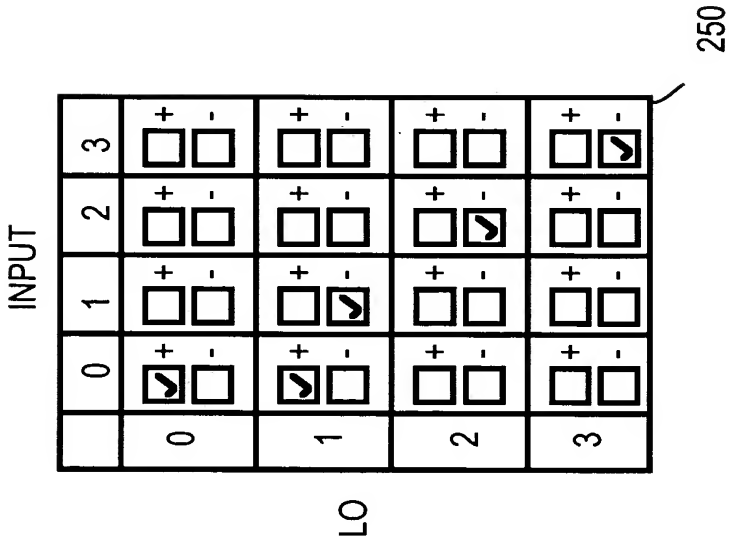

FIGURE 5

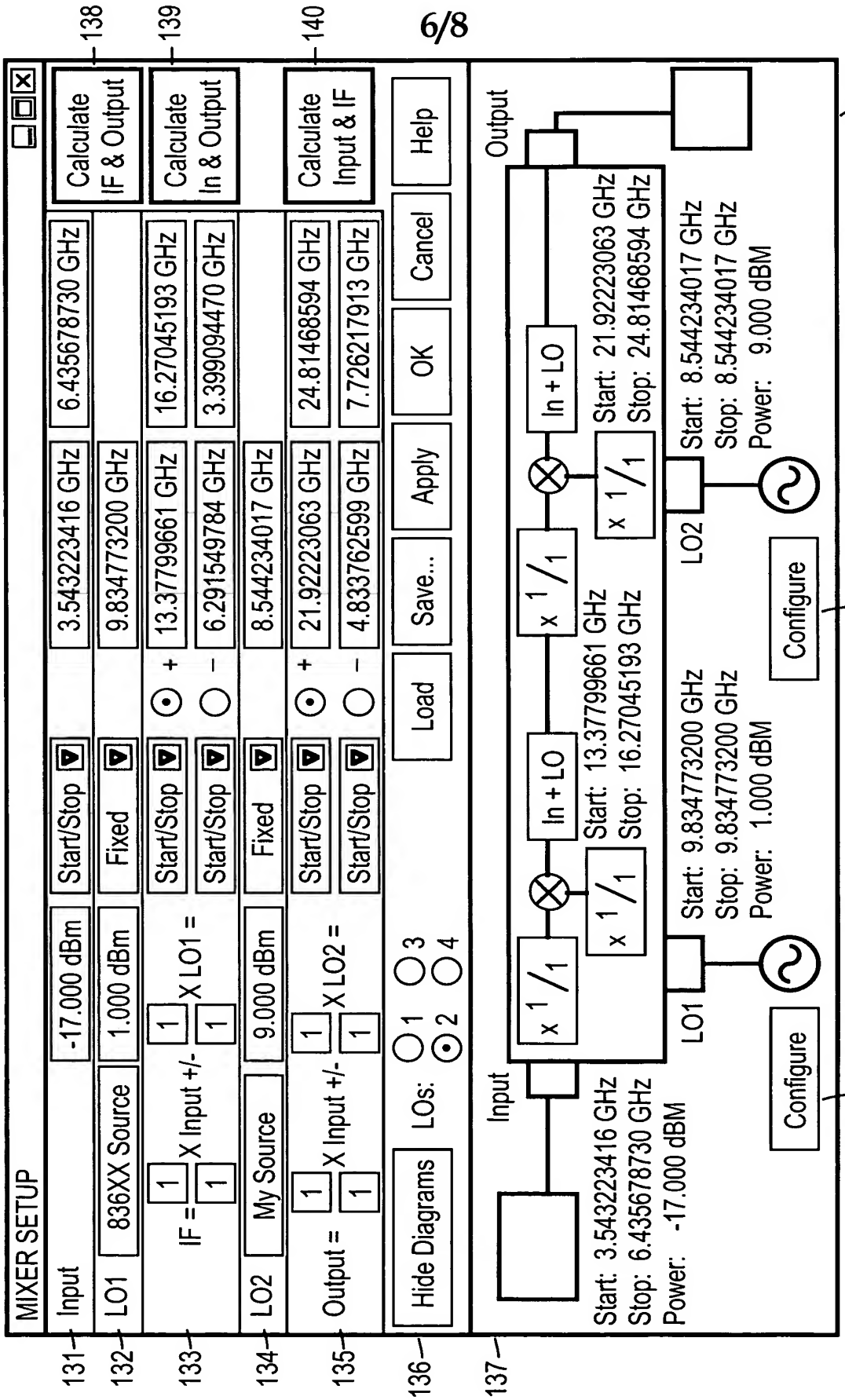
MIXER SETUP
Input
-17.000 dBm
Start/Stop
3.543223416 GHz
6.435678730 GHz
LO1
836XX Source
1.000 dBm
Fixed
9.834773200 GHz
IF = 1/1 X Input +/- 1/1 X LO1 =
Start/Stop
13.37799661 GHz
16.27045193 GHz
Start/Stop
6.291549784 GHz
3.399094470 GHz
LO2
My Source
9.000 dBm
Fixed
8.544234017 GHz
Output = 1/1 X Input +/- 1/1 X LO2 =
Start/Stop
21.92223063 GHz
24.81468594 GHz
Start/Stop
4.833762599 GHz
7.726217913 GHz
Hide Diagrams
LOs: 1 2 3 4
Load
Save...
Apply
OK
Cancel
Help
Calculate IF & Output
Calculate In & Output
Calculate Input & IF
131
132
133
134
135
136
137
138
139
140
Input
Output
x 1/1
In + LO
Start: 3.543223416 GHz
Stop: 6.435678730 GHz
Power: -17.000 dBM
Start: 13.37799661 GHz
Stop: 16.27045193 GHz
Start: 9.834773200 GHz
Stop: 9.834773200 GHz
Power: 1.000 dBM
LO1
LO2
Start: 21.92223063 GHz
Stop: 24.81468594 GHz
Start: 8.544234017 GHz
Stop: 8.544234017 GHz
Power: 9.000 dBM
Configure
Configure
141
142
130

FIGURE 6

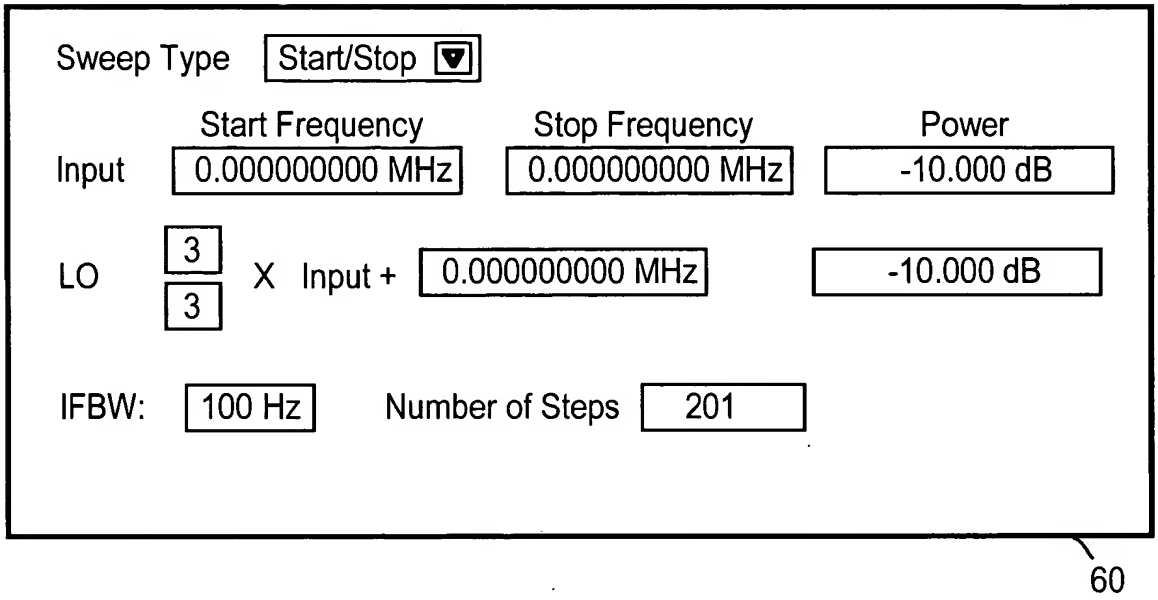
Sweep Type
Start/Stop
Start Frequency
Stop Frequency
Power
Input
0.000000000 MHz
0.000000000 MHz
-10.000 dB
LO
3
3
X Input +
0.000000000 MHz
-10.000 dB
IFBW:
100 Hz
Number of Steps
201
60

FIGURE 7

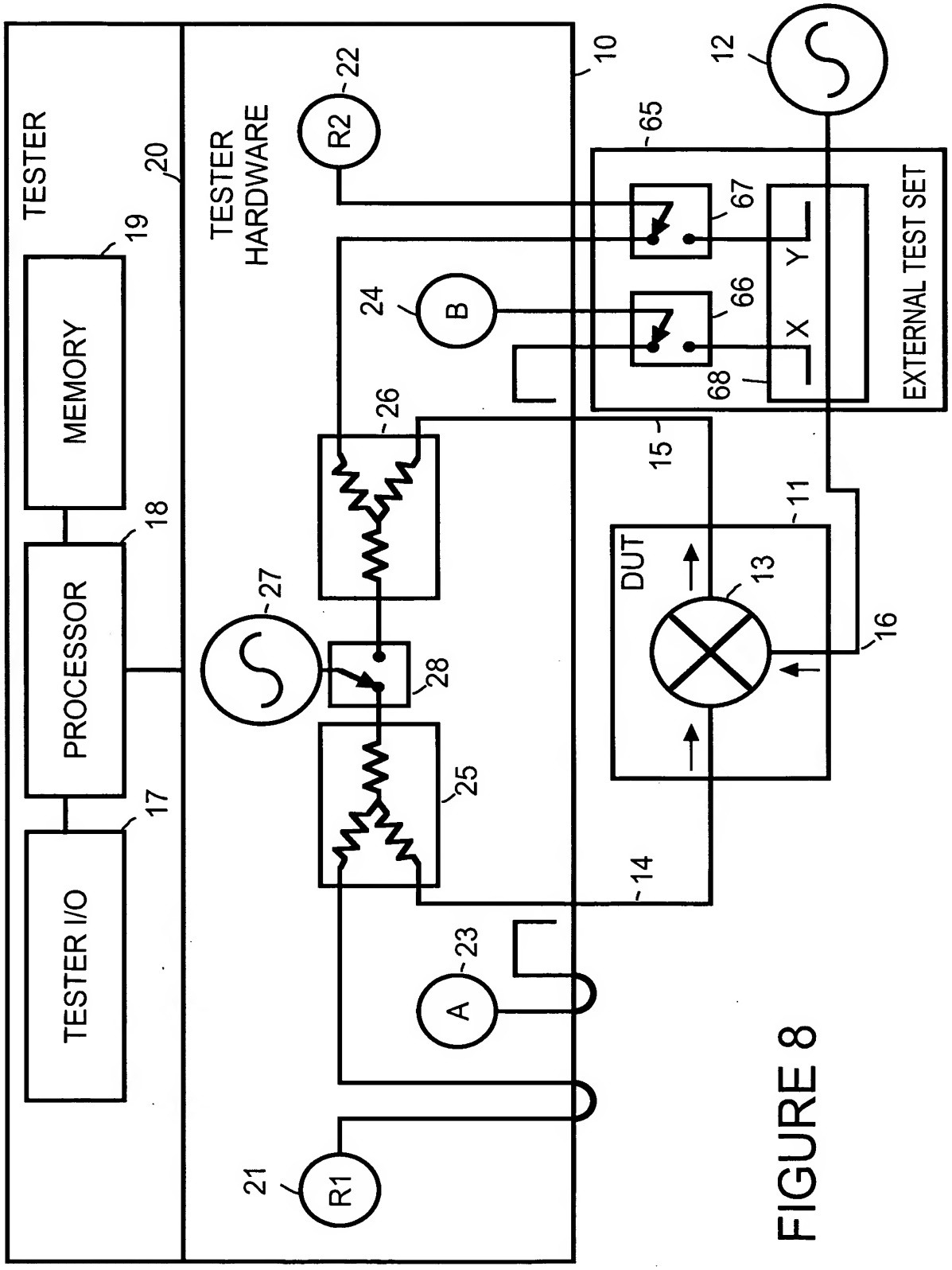
TESTER
MEMORY
PROCESSOR
TESTER I/O
TESTER HARDWARE
EXTERNAL TEST SET
DUT
R1
R2
A
B
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
65
66
67
68
X
Y

FIGURE 8